

# A Time Series Study of the Effectiveness and Costs of EPSDT Outreach in Maine

EDNAMA E JONES, RN, BSN  
JOHN M. NICKERSON, PhD

Mrs. Jones is the EPSDT Coordinator, Bureau of Medical Services, Department of Human Services, State House, Station 11, Augusta, ME 04333. Dr. Nickerson is Professor of Political Science at the University of Maine in Augusta and a member of the graduate faculty in public administration at the University of Maine in Orono.

Tearsheet requests to Mrs. Jones.

## Synopsis .....

Maine's Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) program provides outreach and case management services through written agreements with 13 community-based agencies. These agencies are reimbursed on a cost-related basis for contacting new and re-eligible Medicaid families to inform them about EPSDT services and to enroll children in the program.

Since October 1979, local agency outreach workers have attempted to inform 95 percent of the eligible families in their own homes. Effectiveness was measured by comparing the percentages of families

informed with the 95 percent Federal requirement. Concurrently, but separately, agency costs were monitored.

The authors undertook a study to determine the unit costs of informing families for 4 years and to relate those costs to the percentages of families informed. Using a single group time series design combined with a cost-effectiveness model, both effectiveness and efficiency were examined.

The percentage of families informed increased 7.8 percent from State Fiscal Year (SFY) 1980 through SFY 84. The percent of increase per year, however, has decreased from 3.42 percent to 1.29 percent. The statewide informing unit cost decreased from \$51.19 to \$45.34 during the same time period. Examination of individual agency unit costs indicates that the difference between the lowest and highest agency unit cost is becoming greater each year.

This study has reaffirmed the authors' belief that personal contact with families increases the likelihood of enrolling children in the program; less than 3 percent of the families informed of EPSDT services declined them. The study also indicates that changes in program procedures, reimbursement, or both, are needed to increase further the effectiveness and efficiency of this aspect of the program.

IN THIS TIME OF GROWING PUBLIC AWARENESS of, and concern for, the Federal Government's role in either promoting or limiting health and human services programs, State administrators and legislators appear to be assuming more responsibility for providing health services in a cost-effective manner. For many years State administrators, in partnership with the Federal Government, participated in the policy-making and program-planning process by carrying out Federal programs effectively and efficiently in their States.

The Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) program is an example of a federally regulated program that is carried out by the States. EPSDT, however, is a group of letters whose meaning and importance is often lost on policymakers and on the general public as well. As part of Medicaid, EPSDT is this country's single

largest Federal program providing health care for poor children (1). In Fiscal Year 1982, more than 10 million children (2) were eligible for preventive health services available through the EPSDT program.

In Maine, the Department of Human Services (DHS) was selected as the State agency to administer the program. While many States chose to inform families at intake, Maine negotiated written agreements with 13 home health and community action agencies to provide the informing, outreach, and case management services. These agencies inform families about EPSDT services in their homes following eligibility determination and notify families by mail when periodic screening is due. Local agency staff also follow individual children through the screening, diagnosis, and treatment cycles to ensure that children obtain needed services. Each

agency reports the results of its outreach and case management efforts to the State and is reimbursed on a cost-related basis.

Nationally, identifying a definitive budget or specific cost data for outreach has been difficult. Neither States nor the Health Care Financing Administration (HCFA) has a consistent line item or universal label for EPSDT-related services. Improving the information base was a priority of the Federal Government's Office of Standards and Performance Evaluation for FY 84 (2).

We undertook this study to evaluate the cost-effectiveness of practices used in Maine since October 1, 1979 to inform families about EPSDT. The results of this study will be used for two purposes—in planning to implement revised program regulations as of January 29, 1985, and as a benchmark for evaluating the effectiveness and efficiency of any future efforts. By reporting the results of this study, we also want to emphasize the active role State administrators can take to evaluate and provide direction to programs that are federally funded.

## History and Background

Outreach to those eligible to use EPSDT services is an important component of the EPSDT program. It is a feature that is atypical for a public welfare program (3). Although Medicaid is the "parent" program, EPSDT is functionally quite different from other Medicaid services. The traditional Medicaid program is concerned primarily with financing the care and treatment of acute and episodic health problems and is passive from the standpoint that the program is uninvolved until a claim is presented for reimbursement. In contrast, the EPSDT program involves the concepts of proactive, comprehensive, and preventive health care and seeks to be responsible for assuring the health of individual children through an active program of eligibility identification, outreach, case management, and support services. In addition to providing medical and dental services, State EPSDT programs are required to identify and inform eligible families about available services and to solicit their participation in the program on a periodic basis.

The Social Security Amendments of 1967 required States to provide EPSDT services for Medicaid-eligible persons under the age of 21. Implementing regulations, effective February 2, 1972, specified that families receiving Aid For Dependent Children (AFDC) be informed of available services;

*'The department undertook a three-step examination of new and re-eligible families to obtain a clear picture of the outreach workload, the trends in the size and composition of the caseload, and the extent that outreach objectives had been met.'*

that screening be provided; and, when problems were suspected, that diagnostic and treatment services be provided.

By 1977, the EPSDT program had evolved from a narrowly defined screening program to a total health service delivery system for a large segment of the population which previously had not been receiving adequate health care (4). Combined outreach and case management services with screening, diagnostic, and treatment services delivered on a periodic basis was regarded as a significant step toward ensuring comprehensive health care.

Federal regulations effective October 1, 1979, required States to provide new and re-eligible AFDC families with 13 specific points of information both in writing and through personal contact. If 95 percent of these families were not informed within 60 days of eligibility determination, a financial penalty was to be imposed (5). While the intent of the regulation was positive, focusing on program outcomes, the 95 percent informing standard and the documentation requirements of the regulation were counterproductive to our efforts. Data collection was organized to meet Federal documentation requirements, and often the data collected did not meet the State's needs to evaluate the program and to plan improvements.

On August 13, 1981, the Omnibus Budget Reconciliation Act (OBRA) eliminated the statutory penalty but added the requirement that State Medicaid plans provide information, screening, diagnosis, and treatment for all Medicaid eligible children and youth under 21, not just AFDC recipients. Regulations effective January 29, 1985 (6), provide for a combination of written and oral methods designed to inform effectively all EPSDT-eligible individuals (or their families) of the benefits of preventive health, the services available, and how to obtain

those services. Informing is to take place generally within 60 days of the individual's initial Medicaid eligibility determination. Also, the documentation and data collection requirements are relaxed.

The literature indicates there is agreement that outreach services are an important component of the EPSDT program. There is also agreement that low-income children face a greater risk of health problems than other children. In spite of the health care needs of these children, their parents are not usually oriented to the concept of preventive health care and often do not seek medical or dental services unless a child has obvious symptoms of a problem.

"The Department of Health and Human Services and HCFA strongly believe that EPSDT, when properly implemented, has the potential for assuring the accomplishment of an important long range goal—the reduction and prevention of public dependency—by giving health care to poor youngsters to assure that they move into the mainstream of life" (7).

Effective outreach is essential if low-income families are to be convinced that their interests are best served when they use available health care resources appropriately. A variety of outreach activities may be used alone or in combination. Birch and Davis recommended that when funding and the potential for community assistance are especially limited, a standard information protocol, an information packet, and a performance evaluation should be the minimum foundation for this program component (8).

Although we are not aware that studies are available on the costs and cost-effectiveness of information and outreach activities, we made some assumptions. Outreach consists of all efforts to identify, inform, and involve eligible children and youth in EPSDT. Distributing information through communication media or by mailings is not expensive, but it also is not effective in reaching the children whose families are most alienated and probably are most in need of care. A more successful approach involves personal contact between EPSDT workers and potential program participants. Telephone calls are usually more effective than letters, and personal visits are generally more effective than telephone calls. Reaching out on a one-to-one basis to inform and assist individual children in obtaining care seems to be the most effective method, but it is also the most costly.

In an effort to anticipate Federal changes in the EPSDT program and to meet our obligation to operate the EPSDT program effectively and efficiently,

we developed a paradigm to compare the efforts of local EPSDT agencies with the amounts of money that they are reimbursed.

## The Study

To evaluate the effectiveness of Maine's efforts to inform families and to compare them with program costs, we selected a modified single group time series design. This design permits examination of the impact of changes in program procedures and cost-finding methods that were implemented during the study period. Data for State fiscal year (SFY) 1980 are included to provide a baseline for examination of the effectiveness of outreach efforts, but the data are not included in the examination of costs. Due to the payment mechanism for this period (July 1, 1979 to June 30, 1980), the number of estimates and assumptions needed to derive comparable cost data made the final figures inaccurate.

The 1979 Federal regulations provided the basis for evaluating the effectiveness of informing. The standard used was that 95 percent of all new and re-eligible families must be informed through a personal interview in their own homes within 60 days after eligibility determination.

Two situations produce large numbers of families who technically should be informed face-to-face. Some families lose eligibility because they miss the recertification date to file forms for continued eligibility. They are usually reinstated the next month, however. Also, medically needy recipients seldom remain eligible for long periods; that is, they lose and regain eligibility frequently. Since the department viewed informing these re-eligible families as an excessive burden on the outreach system, the EPSDT coordinator decided that families who had been ineligible for less than 6 months need not be informed face-to-face.

Printouts of new and re-eligible families are sent to the 13 local community-based agencies so the families can be informed. Within 14 days after the close of the 60-day period for informing, the results of the agencies' informing efforts are reported to the State's central office. Families informed face-to-face are designated as participating, as requesting EPSDT services, as having declined EPSDT, or as being undecided about their participation. A participating family is defined as one in which one or more children have received EPSDT services or one that can be tracked under the periodic schedule during its current period of eligibility and has not declined future EPSDT services.

Although reports on efforts to inform and cost data for each of the 13 local agencies were prepared,

Table 1. Percentage distribution of Maine's EPSDT-eligible families, by status (informed, not informed, transferred, and lost eligibility) by State fiscal years 1980-84<sup>1</sup>

EPSDT status	1980 <sup>2</sup> (N = 4,984)	1981 (N = 15,910)	1982 (N = 16,519)	1983 (N = 14,374)	1984 (N = 14,287)
Informed:					
Face-to-face .....	69.42	74.07	74.22	77.39	76.65
Closeout letters .....		2.61	12.55	9.79	8.97
Not informed					
Refused informing .....	3.56	3.30	...	...	...
Not located .....	20.20	11.76	2.13	1.33	.94
Transferred .....		.41	3.84	3.23	2.98
Lost eligibility .....	6.82	7.85	7.26	8.26	10.46
Total .....	100.00	100.00	100.00	100.00	100.00

<sup>1</sup> July 1 through June 30. <sup>2</sup> 5 months reported: February through June 1980.

only statewide totals, percentages, and costs are presented here. As one might expect, both performance and costs vary.

### Effectiveness of Informing

The department undertook a three-step examination of new and re-eligible families to obtain a clear picture of the outreach workload, the trends in the size and composition of the caseload, and the extent that outreach objectives had been met. To evaluate the effectiveness of outreach efforts, the trends in informing families about EPSDT and enrolling children in the program were examined.

In the first step, we calculated percentages of families who were informed fact-to-face in their own homes, who were sent information (closeout) letters, who could not be located, who were transferred to another agency (moved), and who lost Medicaid eligibility before they were informed. Table 1 reflects program changes in March 1981 and shows trends between SFY 80 and SFY 84. The first program change was the institution of a "closeout letter." This information letter and two brochures are sent to those families who refuse a face-to-face interview or who do not keep appointments for one. Before the use of the closeout letter, families who refused the face-to-face contact were considered not informed at all. Families who receive closeout letters are now considered to be informed. The second program change was the creation of reporting codes to designate families who had moved and were transferred to another EPSDT agency, and those to whom closeout letters were sent.

Three trends become evident from examining the data. The first trend is a marked reduction in the percentage of families not located. The department

staff believes this is due not only to the use of closeout letters, but also to the increased expertise of program staff, improvements in data processing programming, and the increased cooperation of the department's district offices in providing residential address information to local agency personnel. The second trend is an increase in the percentage of families who lost eligibility before the 60-day limit expires from 6.82 percent to 10.46 percent. A third trend, related to the second, is the decrease in the total number of families from 16,519 (SFY 82) to 14,287 (SFY 84). Concurrently, AFDC families in the total caseload decreased from 75.9 percent to 72.7 percent, with a corresponding increase in medically needy families from 17.98 percent to 21.33 percent in the past year. These changes appear to be due primarily to a change in eligibility determination rules effective January 1, 1982.

In the second step, we eliminated from the data the number of families transferred and those who lost Medicaid eligibility. Those families who lost eligibility no longer needed to be informed, and the results of informing those transferred to another agency were reported by the receiving local agency. By eliminating these families from the data used in step one, we were able to maintain an unduplicated count of families who needed to be informed, thereby ensuring the accuracy of the percentages of those who were. We then calculated the percentages of those families informed through a face-to-face interview or by a closeout letter and the percentages of families who were not located.

In SFY 80, the Federal regulation was taken literally and families were designated as either informed or not informed, using the face-to-face interview within 60 days as a criterion. Table 2 shows that only 74.5 percent of the families were considered

Table 2. Percentage distribution of Maine's EPSDT-eligible families, by status (informed face-to-face, informed by letter, not informed, not located) by State fiscal years 1980-84<sup>1</sup>

EPSDT status	1980 <sup>2</sup> (N = 4,644)	1981 (N = 14,596)	1982 (N = 14,685)	1983 (N = 12,722)	1984 (N = 12,366)
Informed:					
Face-to-face .....	74.50	80.73	83.49	87.43	88.56
Closeout letters .....		2.85	14.12	11.07	10.36
Not informed .....	25.50	3.60	...	...	...
Not Located .....		12.82	2.39	1.50	1.08
Total .....	100.00	100.00	100.00	100.00	100.00

<sup>1</sup> July 1 through June 30. <sup>2</sup> 5 months reported: February through June 1980.

informed in the first year. Since personal contact in the home was considered to be a major strength of Maine's EPSDT program, a closeout letter was developed at the suggestion of the HCFA Regional Office in Boston and instituted in March 1981. After March, families who were designated previously as not informed were sent letters and then considered informed or reported as not located and still considered not informed.

The high proportion of closeout letters sent in SFY 82 (14.12 percent) was found to be due to the use of the letter as a substitute for diligent outreach efforts. The purpose of the letter was clarified, and the letters decreased 3.05 percent the next year. Although the downward trend continued in SFY 84, closeout letters still accounted for 10.36 percent of all the families informed. When the number of families receiving closeout letters is combined with the families informed face-to-face, the percentage of families informed increased 24.42 percent, from 74.5 percent in SFY 80 to 98.92 percent through SFY 84. During the same time period, however, the percentage of families informed face-to-face increased only 14.06 percent.

The first two steps in examining the effectiveness of outreach efforts involved measuring the results of information efforts against the Federal standard of informing 95 percent of the families within 60 days of eligibility determination. In the third step, we focused attention on the second objective of outreach—enrolling children in the program. Enrolling children is defined as receiving a request for EPSDT services or tracking participating children under the periodic schedule. Of those families who were informed face-to-face, we calculated the percentages of those participating, those requesting EPSDT services, and those families who declined or who were undecided about participating in EPSDT.

Two trends are noted in table 3. First, the families enrolled increased 17.28 percent from SFY 80 to

SFY 84, and those who declined or who were undecided about EPSDT services decreased 3.21 percent. We attribute these changes to the increased ability of staff to promote the program as well as to an increase in re-eligible families, from 41.81 percent (SFY 83) to 45 percent (SFY 84). We made two assumptions about re-eligible families—that families who are informed frequently may be more inclined to accept the preventive health concept and that those families who were previously eligible may have received EPSDT services and can be tracked for future services.

Second, the percentage of families informed face-to-face increased each year at a slower rate than the percentage of families who were enrolled. The ratios of the percents of increase for families informed to families enrolled are 1 to 1.23 in SFY 81, 1 to 1.84 in SFY 82, and 1 to 1.11 in both SFY 83 and 84. Because the ratio remained the same for the past 2 years, we believe that maximum effectiveness, using only face-to-face interviews, may have been reached.

Since the department's data collection is semi-automated, it has not been able to link informing families to services obtained by individual children. Although there are no known criteria against which to measure the results of this study, we believe that when there is a personal contact with families in their own homes, parents are more likely to enroll children in the program.

### Efficiency of Informing

In the first part of our study, we examined the relationship of informing efforts to goals and objectives. In the second part of this study, efficiency (the ratios of outputs to inputs) is examined.

We chose the cost-effectiveness model to compare costs of informing because the model requires only the combining of cost data with effectiveness data and the calculations can be manual. Although

Table 3. Percentage distribution of Maine's EPSDT-eligible families, by status (enrolled, declined or undecided) by State fiscal years 1980-84<sup>1</sup>

EPSDT status	1980 <sup>2</sup> (N = 4,644)	1981 (N = 14,596)	1982 (N = 14,685)	1983 (N = 12,722)	1984 (N = 12,366)
Enrolled .....	68.58	75.69	80.44	84.66	85.86
Declined or undecided .....	5.90	5.05	3.05	2.77	2.69
Total percent .....	74.48	80.74	83.49	87.43	88.55

<sup>1</sup> July 1 through June 30. <sup>2</sup> 5 months reported: February through June 1980.

the cost-effectiveness model is designed to analyze costs and effects of alternative programs, it is used here to compare costs from one year to another. The data prepared for this study can also serve as a baseline for the evaluation of any future methods used to inform families about EPSDT.

The cost-effectiveness part of this study was accomplished in three steps that parallel the effectiveness part of the study: identifying agency workload and determining statewide unit of service costs, calculating total costs and unit costs of informing families face-to-face, and comparing the trends in effectiveness with trends in efficiency.

In the first step, we identified agency workload and determined statewide unit costs. Major activities performed by all local EPSDT agencies which are reported consistently to the State were isolated. The sum of the number of families to be informed, the number of children due for screening, and the number of children for whom screening had been requested was defined as an agency's workload. The workload totals for each State fiscal year represent output in the ratio of output to input. Input can be defined as the number of personnel, personnel costs, or both personnel and nonlabor costs. Costs of informing could not be isolated because outreach workers do not keep detailed time records. We decided, therefore, to use total agency costs billed to the State for each fiscal year. These costs include direct program costs as well as administrative support and operating costs. Statewide unit costs were derived by dividing total agency costs for each fiscal year by the sum of workload units for that year.

In the second step, we calculated the total costs and unit costs of informing families. Although the means of the 13 agencies' unit costs, the differences between the highest and lowest unit costs (ranges), standard deviations, and variances were calculated for each year, they were used to compare each of the agencies' costs from year to year, with each other, and with statewide data. For this study we calculated the total costs of informing, using

statewide unit costs, rather than the means of the agencies' costs. Total costs of informing families through a face-to-face interview were calculated by multiplying statewide unit costs by the number of families reported by the 13 local agencies.

The total number of families to be informed is the total number of new and re-eligible families minus those who were transferred or who lost their Medicaid eligibility. Unit costs of informing were derived by dividing the total costs of informing families by the number of families informed in a face-to-face interview.

We recognize that these data have limitations due to the way in which costs were derived. Since a more direct way of arriving at costs was not available, we adapted the available information to the model, controlling for as many variables as possible. Data were examined for trends; they were not examined for absolute values.

Table 4 summarizes the initial data used to determine cost-effectiveness and illustrates the steps in the process for those who may want to use this model. When reviewing the rows from left to right, one observes several changes from year to year. There is a 4.05 percent increase in total agency costs in SFY 82, followed by a 7.38 percent decrease in SFY 83 and a 7.31 percent decrease in SFY 84. These decreases are due primarily to decreased numbers of full-time equivalent staff. The changes in total agency costs in SFY 83 and SFY 84 are also due to revisions in the principles of reimbursement, effective January 1, 1983. These revised principles reflect changes in the program and in the department's efforts to standardize allowable administrative and operating costs. Changes in the workload units of service reflect the changes in the number of eligible children from year to year, which we described earlier.

Cursory examination of the increases and decreases in the statewide unit costs in table 4 is deceptive. There is an initial impression that the percentages of change are not significant. However, upon closer examination of table 5, we can see

Table 4. Maine's methodology to determine EPSDT informing unit costs for State fiscal years 1981-84

Process	1981	1982	1983	1984
Total agency costs .....	\$1,753,671	\$1,824,710	\$1,690,130	\$1,566,602
÷ Workloads .....	42,428	43,326	40,358	39,023
= Statewide unit costs .....	\$41.33	\$42.12	\$41.88	\$40.15
× Total number families .....	14,596	14,685	12,722	12,366
= Total informing costs .....	\$603,253	\$618,532	\$532,797	\$496,495
÷ Number of families informed .....	11,784	12,261	11,123	10,951
= Informing unit costs .....	\$51.19	\$50.45	\$47.90	\$45.34

Table 5. Statewide unit costs and the ranges, means, standard deviations, and variances for the unit costs of the 13 local agencies by State fiscal years 1981-84<sup>1</sup>

Cost variables	1981	1982	1983	1984
Statewide unit costs	\$41.33	\$42.12	\$41.88	\$40.15
Ranges .....	\$47.41	\$43.46	\$55.43	\$67.48
Mean unit costs . . .	\$47.26	\$46.83	\$47.39	\$46.47
Standard deviations	14.30	14.48	15.09	16.78
Variances .....	204.39	203.71	227.64	281.54

<sup>1</sup> July 1 through June 30.

clearly that when total agency costs, statewide unit costs, and the agencies' mean unit costs are compared, the increases and decreases are significant. In SFY 83, the total agency costs decreased 7.38 percent and the statewide unit cost decreases only 0.56 percent, but at the same time the mean unit cost increased 1.2 percent. In SFY 84, total agency costs decreased 7.31 percent and the statewide unit cost decreased 4.13 percent, while the mean unit cost decreased 1.94 percent.

These differences prompted us to investigate the relationship of agency costs to the sizes of workloads, the details of which we will not report here. Essentially, our investigation showed that the range between the highest and lowest agency unit costs is becoming greater over time and that agencies with small workloads do not provide services as efficiently as those with large workloads. We are led to believe that the economy of scale is being eroded as the number of eligibles continues to decrease.

In the third step of examining the cost-effectiveness of informing, we compared trends in effectiveness with trends in efficiency. Effectiveness data (table 2) were combined with efficiency data (table 4) as displayed in table 6. For each fiscal year, effort is the total cost of informing, effectiveness is the number of families informed face-to-face, impact is the percentage of families informed face-to-face, and, cost-effectiveness is the unit cost of informing.

Reviewing these figures from top to bottom, we

observed that the costs per year and the number of families informed (effectiveness) increased in SFY 82 and then decreased in SFY 83 and 84. Except for SFY 82, the percentage of change for costs has been greater than the percentage of change in the number of families informed. While the number of families informed increased in SFY 82 and then decreased in SFY 83 and 84, the percentage of families informed face-to-face (impact) increased by 3.42 percent in 1982, 4.72 percent in 1983, and 1.29 percent in 1984. The cost-effectiveness of informing families through a face-to-face interview also increased, that is, the informing unit costs decreased 1.45 percent in SFY 82, 5.05 percent in SFY 83, and 5.34 percent in SFY 84. Based on these observations alone, it appears that agencies are becoming more effective and more efficient over time.

## Conclusions

States have the responsibility to develop and to implement the EPSDT program as effectively and efficiently as possible. They have the option either of carrying out all of the Federal program or of delegating tasks to private or other public units. In this time of concern for limited Federal funding, all program administrators must be cost conscious. The identification of specific program data and related costs, however, is perhaps not easily accomplished by all States. We believe that with the implementation of the revised EPSDT regulations, which allow States more flexibility in providing and evaluating outreach and case management services, more States will be able to provide cost-effectiveness information about their own programs. Until such data are available for comparison, we can only evaluate our findings subjectively, within the framework of the size of our program, resources available, and budgetary constraints.

There are two major limitations of this study's methodology. First, descriptive research statistics need to be interpreted with caution. We attempted to take into consideration as many external factors

as possible by defining terms concisely and by adapting the research design to our own environment. Second, the cost-effectiveness model provides only cost data with no consideration given to benefits derived from alternatives. While the cost-effectiveness model does not provide complete data on which to make decisions, it can be a useful method for managers to evaluate, rather than simply monitor, their activities.

This study was undertaken to determine the cost effectiveness of the face-to-face method of informing families about EPSDT. After examining data for both effectiveness and efficiency, three matters of significance stand out. One, the use of only statewide data provides an overview of progress and cost trends; the data do not point to specific problems. Two, changes in the program or State agency procedures or both must be made to increase the effectiveness of informing families. And, three, additional studies should be conducted.

The trends noted in this study are encouraging, but without making changes in the program, procedures, or reimbursement to agencies, further progress may not be feasible. Interviews with agency staff indicate that external factors, such as extremely mobile families, may prevent staff from attaining higher percentages of face-to-face informing; in other words, informing 88.56 percent of new and re-eligible families may be the highest attainable level using interviews in families' homes. Cost containment may not be possible because of inflation combined with continuing low numbers of Medicaid-eligible children.

Several alternatives can be investigated further. A first alternative is to develop a means of further standardizing costs for effective service. This could be accomplished by preparing an expanded report, using the study methodology for each agency. This step may assist the department in identifying individual agencies whose procedures are both effective and efficient. We could then evaluate their practices and have other agencies adopt them. A second alternative is to consolidate geographic areas served in order to capitalize on the economies of scale.

A third alternative is to concentrate outreach efforts on those families who are currently receiving closeout letters. This could increase the percentage of families enrolled in the program. A fourth alternative is to provide outreach and case management services using the DHS personnel in the department's district offices. Recommendations such as these, however, also require examination of the benefits which could be derived from making no changes; changing procedures only; consolidating

Table 6. Maine's cost-effectiveness of informing families (face-to-face) about the EPSDT program for State fiscal years 1981-84<sup>1</sup>

State fiscal year	Cost per year (statewide unit cost x families to be informed)	Effectiveness (number of families informed)	Impact (percent families informed face-to-face)	Cost-effectiveness (cost per year ÷ number of families informed)
1981 .....	\$603,253	11,784	80.73	\$51.19
1982 .....	\$618,532	12,261	83.49	\$50.45
1983 .....	\$532,797	11,123	87.43	\$47.90
1984 .....	\$496,495	10,951	88.56	\$45.34

<sup>1</sup> July 1 through June 30.

workloads; using DHS staff; or combining one or more of these alternatives.

The data demonstrate that the percentage of families informed through a face-to-face interview has increased from 74.5 percent in SFY 80 to 88.56 percent in SFY 84. We recognize that we did not attain the 95 percent informing standard set by the 1979 Federal regulations; however, statewide effectiveness data indicate that when families are informed through a face-to-face contact in their own homes, less than 3 percent of them declined EPSDT or were undecided about their participation. The data also indicate that the costs of informing are decreasing. Although statewide unit costs have decreased, the range between the lowest and highest agency unit costs has continued to widen.

This retrospective examination of effectiveness and efficiency has reinforced our belief that personal contact with families in their own homes increases the likelihood of their children's participation in EPSDT. While we believe that the findings of this study favor continued support for the informing interview, we also think that not all families require a face-to-face contact.

Future plans of the department include the development of alternative outreach methods such as informing families by telephone and changing the reporting results from "families" to "children." Linking data on informing families and the family's status of participation to data on services obtained by individual children is impossible to accomplish manually. When the EPSDT informing results are computerized, the department will be able to link informing methods, parental decisions, and EPSDT services obtained for individual children. Combining these data with outcomes and costs of screening, diagnosis, and treatment will enable the department to evaluate the effectiveness and efficiency of the total program.



## References .....

1. Children's Defense Fund: EPSDT—does it spell health care for poor children? Washington Research Project, Inc., Washington, DC, June 1977, preface, p. (V).
2. EPSDT, program report: fiscal year 1983. Health Care Financing Administration, Baltimore, MD, Sept. 26, 1983. Mimeographed.
3. Keller, W. J.: Study of selected outcomes of the Early and Periodic Screening, Diagnosis, and Treatment program in Michigan. Public Health Rep 98: 110–119, March–April 1983.
4. EPSDT: organization. HCFA Publication No. 77–24526. Health Care Financing Administration, Baltimore, MD, 1977.
5. Medicaid requirements for state programs of early and periodic screening, diagnosis, and treatment of individuals under 21. Federal Register 44: 29420–29427, No. 98, May 18, 1979.
6. Medicaid program: Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) program. Federal Register 49: 43654–43667, No. 212, Oct. 31, 1984.
7. EPSDT: a selected annotated bibliography. Introduction. HCFA Publication No. 20042. Health Care Financing Administration, Baltimore, MD, 1981, p. (i).
8. Effective practices: state developed technology. HCFA Publication No. 02146. Health Care Financing Administration, Baltimore, MD, August 1982.

## Converting a Teaching Hospital Medical Clinic to a Group Practice: Patients Vote with Their Feet

JAY A. ROBERTS, MPA  
GEOFFREY GIBSON, PhD

Mr. Roberts and Dr. Gibson are with the Mount Sinai Medical Center, Mr. Roberts with Internal Medicine Associates, Division of General Internal Medicine, and Dr. Gibson with the Department of Health Care Management.

Tearsheet requests to Jay A. Roberts, Administrator, Internal Medicine Associates, Division of General Internal Medicine, Mount Sinai Medical Center, One Gustave L. Levy Place, New York, NY 10029.

## Synopsis .....

*Traditional general medical clinics (GMCs) have been criticized as providing less than optimal primary care while losing money for the sponsoring teaching hospital. In addition, the GMC has become less attractive as a site for training house staff.*

*In response, a number of teaching hospitals have sponsored the development of a primary care group practice as a more efficient alternative to the GMC. Under the new model, certain measures of patient*

*care frequently improve, house staff receive better training, and the hospital may be able to trim financial losses.*

*While the literature contains numerous descriptions of such conversions, very little information is available about the compliance of patients who are transferred to the new model with relatively little preparation or choice. Institutions that convert their GMCs may do so to attract new clientele. But they have a responsibility to their long-time patients and certainly should address the question of whom they expect to transfer successfully and what the dropout rate will be.*

*New York City's Mount Sinai Hospital completed conversion of its GMC to a primary care group practice in 1983. A sampling of patients taken before the conversion, then followed up 6 months later, revealed that 82 percent of the former GMC patients were successfully referred to the new model. Patients given specific appointments rather than instructions to call for their own appointment had a better "show" rate. Noncompliers were more likely to be female, Medicaid-covered, 46–65 years old, and living outside the hospital's immediate service area. Our data suggest that when hospitals close a GMC and transfer patients to a hospital-sponsored alternative, they can expect to refer most patients successfully.*

EVIDENCE THAT TEACHING HOSPITALS are dissatisfied with their traditional general medical clinics (GMCs) abounds. The literature has adequately documented the reasons for this dissatisfaction (1,2), the alternatives that address the problem

(3–5), and some of the results of conversion to various new models for provision of care (6,7).

Some converted GMCs have as a goal attracting a new clientele. Others expect to shift their current patients to a new model. Still others have not con-